State of California Business, Transportation and Housing Agency

Memorandum

To: DISTRICT PLANNING CHIEFS
DISTRICT ENVIRONMENTAL BRANCH CHIEFS

Date: October 22, 1999

File No.: E-300

From: **DEPARTMENT OF TRANSPORTATION**
ENVIRONMENTAL PROGRAM - MS27

Subject: FHWA Implanting Guidance on Invasive Species for Executive Order 13112

On February 3, 1999, President Clinton signed Executive Order 13112 (E.O.) which requires Executive Branch agencies to work cooperatively to prevent and control the introduction and spread of invasive plant and animal species. Transportation systems, in particular, highway corridors, can facilitate the spread of invasive species outside their natural range by providing opportunities for the movement of these species throughout the landscape.

The E.O. requires the Federal Highway Administration (FHWA) to not authorize, fund or carry out any action that can likely cause or promote the introduction or spread of invasive species. After November 15, 1999, the FHWA California Division will not authorize final NEPA compliance for an action "unless appropriate analysis of the probability of the action to cause or promote the introduction or spread of invasive species has been accomplished" (Enclosure 1). The National Invasive Species Council is currently developing a list of invasive plants and animals. Until this list is published, FHWA guidelines recommend project analysis use statewide and regional information for locally recognized invasive species. In the interim Districts should use the California Department of Food and Agriculture's noxious weed list to define the invasive plants, and contact the County Agricultural Commissioner and Department of Fish and Game regional office for information regarding locally significant invasive animals.

Enclosed for your information and use is: (1) a memo from FHWA to Caltrans Director Josè Medina (September 8, 1999); (2) FHWA Guidance on Invasive Species (August 10, 1999) discussing implementation of the E.O. (3) Questions and Answers on Invasive Plant Species, a paper providing answers to questions related to the E.O. and FHWA guidance; (4) a copy of E.O. 13112; (5) Policy Statement on Invasive Alien Species (April 22, 1999), Secretary of Transportation Slater's Policy Statement on Invasive Species; (6) Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds (April 26, 1994), the Executive Memorandum on landscaping referenced in the E.O.; and (7) Pest Ratings of Noxious Weed Species and Noxious Weed Seed, the California Department of Food and Agriculture's noxious weed list.

Please review and distribute this information to all staff with responsibilities in environmental coordination and documentation, endangered species, and land management. Should you have any questions, please contact Gary Winters, Chief, Biological Studies, at (916) 653-7466, or Calnet 8-453-7466.

BRIAN J. SMITH
Program Manager
Environmental Program

Enclosure

Enclosure 1

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CALIFORNIA DIVISION
980 Ninth Street, Suite 400
Sacramento, CA 95814-2724

September 8, 1999

IN REPLY REFER TO

HDA-CA
File #:572
Document #: S-26965

Mr. José Medina, Director
CALTRANS, 1120 N Street
Sacramento, California 95814

Attention: Federal Resources Branch, Room 3500
for Brian Smith and Robert Buckley

Dear Mr. Medina:

SUBJECT: FHWA IMPLEMENTING GUIDANCE ON INVASIVE SPECIES FOR EXECUTIVE ORDER 13112

Enclosed for your information and use is a copy of the Federal Highway Administration's (FHWA) August 10, 1999, guidance regarding implementation of President Clinton's February 3, 1999, Executive Order 13112 (E.O.) (Encl 1) requiring Federal agency action to combat the introduction or spread of invasive species in the United States. In addition, enclosed for your information is: (2) a paper providing answers to questions related to the E. O. and FHWA guidance; (3) a copy of E. O. 13112; (4) a copy of Secretary of Transportation Slater's Policy Statement on Invasive Species; and (5) the Executive Memorandum on Landscaping referenced in the E. O.

The E. O. requires that FHWA not authorize, fund or carry out any action that can likely cause or promote the introduction or spread of invasive species. To initiate compliance, the FHWA California Division has established November 15, 1999, as the date after which no final NEPA clearance will be given for an action unless appropriate analysis of the probability of the action to cause or promote the introduction or spread of invasive species has been accomplished. Until a national list of invasive plants is approved, the analysis should use the State's noxious weed list to define the invasive plants that must be considered. If the analysis indicates that the disturbances caused by the action have the potential to promote the introduction or spread of invasive species, all feasible and prudent measures that will be taken to minimize this likelihood will be identified.

Under the E.O., State Departments of Transportation (DOTs) have new opportunities to address roadside vegetation management issues on both their construction activities and maintenance programs. Through new levels of cooperation and communication with other agencies and conservation organizations at all levels, the highway program offer a coordinated response against the introduction and spread of invasive species.

The E.O. builds on the National Environmental Policy Act (NEPA) of 1969, the Federal Noxious Weed Act of 1974, and the Endangered Species Act of 1973 to prevent the introduction of invasive species, provide for their control, and take measures to minimize economic, ecological, and human health impacts. In response to the proactive policy of the Office of the Secretary of Transportation and the E.O., the FHWA offers the following guidance:

Use of Federal Funds:

Under the E.O., Federal agencies cannot authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless all reasonable measures to minimize risk of harm have been analyzed and considered. Complying with the E.O. means that Federal-aid and Federal Lands Highway Program funds cannot be used for construction, revegetation, or landscaping activities that purposely include the use of known invasive plant species. Until an approved national list of invasive plants is defined by the National Invasive Species Council, "known invasive plants" are defined as those listed on the official noxious weed list of the State in which the activity occurs. The FHWA recommends use of Federal-aid funds for new and expanded invasive species control efforts under each State DOTs' roadside vegetation management program.

FHWA NEPA Analysis:

Determinations of the likelihood of introducing or spreading invasive species and a description of measures being taken to minimize their potential harm should be made part of any process conducted to fulfill agency responsibilities under NEPA. Consideration of invasive species should occur during all phases of the environmental process to fulfill the requirements of NEPA. For example, during scoping, discussions with stakeholders should identify the potential for impacts from invasive species and include possible prevention and control measures. The actual NEPA analysis should include identification of any invasive terrestrial or aquatic animal or plant species that could do harm to native habitats within the project study area. This could involve the mapping all existing invasive populations on and adjacent to the project and a survey of existing soils for invasive potential. Also, the analysis should include the potential impact of the disturbances caused by construction on the spread of invasives. Finally, the analysis should include a discussion of any preventative measures or eradication measures that will be taken on the project. Measures may include the inspection and cleaning of construction equipment, commitments to ensure the use of invasive-free mulches, topsoils and seed mixes, and eradication strategies to be deployed should an invasion occur. Until the National Vegetation Management Plan specified in the E.O. is completed, NEPA analyses should rely on each State's noxious weed list to define the invasive plants that must be addressed and the measures to be implemented to minimize their harm.

The FHWA strongly encourages statewide, right-of-way inventories of vegetation that map existing invasive plant infestations to provide information for NEPA analysis. In addition, the FHWA encourages the DOTs to develop their own vegetation management plans based on the E.O., their own statewide invasive plant inventories, and the National plan when available. In absence of a specific State or State DOT plans, the National plan will serve as policy and guidance to the States.

State DOT Activities and Funded Facilities:

The FHWA encourages the State DOTs to implement the Executive Memorandum on Beneficial Landscaping at every opportunity. This includes applying it to highway landscaping projects, rest area construction, scenic overlooks, State entrances, and Transportation Enhancement activities. In addition, FHWA recommends that roadside maintenance programs be given the necessary support to control and prevent invasive species.

Innovative Design:

The FHWA encourages the selection of construction and landscaping techniques and equipment that will contribute to accomplishing the intent of the E.O. These include bio-control delivery systems, more efficient equipment cleaners, improved seeding equipment for steep slopes, safer burn management equipment, easier-to-use Geographic Positioning Systems for invasive population inventories, and methods to minimize soil disturbance during vegetation management activities so as to reduce the opportunities for the introduction of invasive species.

Coordinated Research:

The FHWA environmental research program will promote studies on invasive plant control methods, and restoration of native species after control. We will make a concerted effort to support applied research relevant to State DOT vegetation management programs. Results will proactively be shared among States and other State and Federal resource agencies.

Training:

The FHWA suggests increased training of vegetation managers in maintenance districts, landscape units, and erosion control sections within each State DOT. Integrated vegetation management principles should be included in this training. The FHWA will provide training materials for identification of invasive plants, and restoration of native plants, plus encourage regional workshops in its four national Resource Centers. The FHWA supports increased public education, especially resulting from interagency partnerships. State agencies are also encouraged to take steps to increase public awareness about invasive plant species and the integrated management methods used to control and prevent invasives.

Interagency Cooperation:

The FHWA recommends that State DOTs participate in State invasive species councils as they are established. These interagency councils will likely include Federal agencies, State, local and tribal governments. Many States have already begun to organize these councils to promote cooperative work on invasive species issues within their State. These groups can share public awareness, training, data bases, policy, and research information and be a resource the National Invasive Species Council. The FHWA suggests that each State DOT cooperate with adjacent State DOTs to establish coordinated prevention and control measures for invasive species.

Interagency Committees:

The FHWA will continue to participate in the coordinated activities of FICMNEW, NPCI, and the Aquatic Nuisance Species Task Force (ANS). The FICMNEW initiates cooperative projects aimed at public awareness, policy, training, and research on invasive plant issues. The NPCI addresses non-native invasive species issues across agencies in an effort to protect and to restore native plant communities nationwide. The ANS focuses interagency efforts on those aquatic plant and animal species that impact our Nation's waterways. The FHWA encourages participation by State DOTs in the State Interagency Invasive Species Councils.

FEDERAL HIGHWAY ADMINISTRATION GUIDANCE ON INVASIVE SPECIES

August 10, 1999

BACKGROUND

On February 3, 1999, President Clinton signed Executive Order 13112 (E.O.) which calls on Executive Branch agencies to work to prevent and control the introduction and spread of invasive species. Nonnative flora and fauna can cause significant changes to ecosystems, upset the ecological balance, and cause economic harm to our Nation's agricultural and recreational sectors. For example, introduced plants, such as Kudzu in the southeastern States and purple loosestrife throughout the country, have choked out native plant species and consequently have altered wildlife and fish habitat. Transportation systems can facilitate the spread of plant and animal species outside their natural range, both domestically and internationally. Those species that are likely to harm the environment, human health, or economy are of particular concern.

The Department of Transportation's efforts to prevent the introduction and spread of invasive species are consistent with: (1) the Department's strategic goal of protecting the natural environment, service, and teamwork; (2) statutory mandates to protect against aquatic invasive species; (3) the Department's active participation on interagency committees such as the Federal Interagency Committee for Management of Noxious and Exotic Weeds (FICMNEW), the Native Plant Conservation Initiative (NPCI), the Interagency Ecosystem Management Task force, and the Interagency Working Group on Endangered Species; and (4) the 1994 Presidential Memorandum on Environmentally and Economically Beneficial Landscaping Practices. The U.S. Department of Transportation has traditionally been in the forefront of national efforts to prevent and control the introduction of invasive species. On April 22, 1999, Secretary Slater issued a policy statement directing DOT's operating administrations to implement E.O. 13112.

Highway corridors provide opportunities for the movement of invasive species through the landscape. Invasive plant or animal species can move on vehicles and in the loads they carry. Invasive plants can be moved from site to site during spraying and mowing operations. Weed seed can be inadvertently introduced into the corridor during construction on equipment and through the use of mulch, imported soil or gravel, and sod. Some invasive plant species might be deliberately planted in erosion control, landscape, or wildflower projects. Millions of miles of highway rights-of-ways traverse public and private lands. Many of these adjacent lands have weed problems and the highway rights-of-way provide corridors for further spread.

GUIDELINES

Under the E.O., State Departments of Transportation (DOTs) have new opportunities to address roadside vegetation management issues on both their construction activities and maintenance programs. Through new levels of cooperation and communication with other agencies and conservation organizations at all levels, the highway program offer a coordinated response against the introduction and spread of invasive species.

The E.O. builds on the National Environmental Policy Act (NEPA) of 1969, the Federal Noxious Weed Act of 1974, and the Endangered Species Act of 1973 to prevent the introduction of invasive species, provide for their control, and take measures to minimize economic, ecological, and human health impacts. In response to the proactive policy of the Office of the Secretary of Transportation and the E.O., the FHWA offers the following guidance:

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Interagency Cooperation:

The FHWA recommends that State DOTs participate in State invasive species councils as they are established. These interagency councils will likely include Federal agencies, State, local and tribal governments. Many States have already begun to organize these councils to promote cooperative work on invasive species issues within their State. These groups can share public awareness, training, data bases, policy, and research information and be a resource the National Invasive Species Council. The FHWA suggests that each State DOT cooperate with adjacent State DOTs to establish coordinated prevention and control measures for invasive species.

Interagency Committees:

The FHWA will continue to participate in the coordinated activities of FICMNEW, NPCI, and the Aquatic Nuisance Species Task Force (ANS). The FICMNEW initiates cooperative projects aimed at public awareness, policy, training, and research on invasive plant issues. The NPCI addresses non-native invasive species issues across agencies in an effort to protect and to restore native plant communities nationwide. The ANS focuses interagency efforts on those aquatic plant and animal species that impact our Nation's waterways. The FHWA encourages participation by State DOTs in the State Interagency Invasive Species Councils.

QUESTIONS AND ANSWERS ON INVASIVE PLANT SPECIES

Where can we get more information about weed control?

Most State DOTs have an annual herbicide applicators' training session. Always check first with your State's Department of Agriculture and Department of Natural Resources or similar agencies for applicable regulations and technical information. Include the herbicide industry and their research results for control information on your State's target species. Your University and Extension Service should be included also. Check websites, such as that of the Federal Interagency Committee for Management of Noxious and Exotic Weeds (FICMNEW) at http://bluegoose.arw.r9.fws.gov/FICMNEWFiles/FICMNEWHomePage. Through this homepage, you can link to related sites for additional information and contacts. Finally, consult the 1999 FHWA handbook, *Roadside Use of Native Plants*, for more information.

What can the National Invasive Species Council do for us?

The Council is intended to avoid overlap and redundancy of work being done on invasive species control. By combining research projects, training efforts, public awareness tactics, cooperative agreements, and other resources, we all can avoid wasting precious time and funds in the battle against invasive plants. Its national view and participation should encourage beneficial connections and new partnerships. In the long run, this unprecedented cooperation should save money and diminish the impacts caused by invasive species.

What kinds of research will be supported?

The FHWA will support applied research projects that would apply to many States, develop innovative methods for control of key invasive plants, characterize roadside environments, benefit wildlife habitat, improve water quality, integrate vegetation management tools, improve native plant restoration techniques for rights-of-way, and increase public awareness about non-native invasive and native vegetation.

What technical support can we expect?

The FHWA will continue as a technical resource to each State Highway Agency. The FHWA will share recent research products and fund new research. The FHWA will cooperate with other Federal and State agencies in meaningful partnerships. The FHWA will publish invasive species information in its quarterly newsletter, *Greener Roadsides*. The FHWA will offer training workshops at our four Resource Centers. The FHWA will act as part of your network and connection to other related networks. An FHWA Vegetation Management website at http://www.fhwa.dot.gov/environment

will be on line in the near future to make these connections. The FHWA will encourage roadside vegetation reviews by State and FHWA in 3 years to determine the results of the Executive Order's intent in each State.

How will environmental documents be affected?

Since the spread of invasive plant species is somewhat predictable and avoidable on construction and related projects, an analysis of site conditions and a plan for minimizing weed introduction and spread could be accomplished during the environmental process. On projects where the potential exists for the introduction or spread of invasive species, the environmental document should include a discussion of the potential impact of these species and any anticipated prevention or control measures to be taken.

Will State Vegetation Management Plans be required?

No. There is no requirement in Executive Order 13112 for State DOT vegetation management plans. Under the Order, the National Invasive Species Council has 18 months to provide a national plan. A State may wish to develop their own plan to specifically deal with species of concern. State DOTs should be involved in the development of any State plans and should be prepared to offer their own vegetation management objectives and solutions.

How can States use native plants as much as practicable as called for by the Presidential Memorandum on beneficial landscaping?

The use of native plants is practicable only when native plants and/or seed are reasonably available in the State. Some creativity will be necessary i.e., salvaging native plants in the way of construction, harvesting native plant seed from the project locality, notifying existing growers of your upcoming needs as far in advance as possible, and contract-growing native plants and native seed whenever you can prove cost-effectiveness as alternative to low bid.

Executive Order 13112 of February 3, 1999

Invasive Species

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), Non-indigenous Aquatic Nuisance Prevention and Control Act of 1990, as amended (16 U.S.C. 4701 et seq.), Lacey Act, as amended (18 U.S.C. 42), Federal Plant Pest Act (7 U.S.C. 150aa et seq.), Federal Noxious Weed Act of 1974, as amended (7 U.S.C. 2801 et seq.), Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), and other pertinent statutes, to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause, it is ordered as follows:

Section 1. *Definitions*

(a) "Alien species" means, with respect to a particular ecosystem, any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.

(b) "Control" means, as appropriate, eradicating, suppressing, reducing, or managing invasive species populations, preventing spread of invasive species from areas where they are present, and taking steps such as restoration of native species and habitats to reduce the effects of invasive species and to prevent further invasions.

(c) "Ecosystem" means the complex of a community of organisms and its environment.

(d) "Federal agency" means an executive department or agency, but does not include independent establishments as defined by 5 U.S.C. 104.

(e) "Introduction" means the intentional or unintentional escape, release, dissemination, or placement of a species into an ecosystem as a result of human activity.

(f) "Invasive species" means an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.

(g) "Native species" means, with respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem.

(h) "Species" means a group of organisms all of which have a high degree of physical and genetic similarity, generally interbreed only among themselves, and show persistent differences from members of allied groups of organisms.

(i) "Stakeholders" means, but is not limited to, State, tribal, and local government agencies, academic institutions, the scientific community, non-governmental entities including environmental, agricultural, and conservation organizations, trade groups, commercial interests, and private landowners.

(j) "United States" means the 50 States, the District of Columbia, Puerto Rico, Guam, and all possessions, territories, and the territorial sea of the United States.

Section 2. *Federal Agency Duties*

(a) Each Federal agency whose actions may affect the status of invasive species shall, to the extent practicable and permitted by law, (1) identify such actions;(2) subject to the availability of appropriations, and within Administration budgetary limits, use relevant programs and authorities to: (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to and control populations of such species in a

cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded; (v) conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and (vi) promote public education on invasive species and the means to address them; and (3) not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to guidelines that it has pre-scribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.

(b) Federal agencies shall pursue the duties set forth in this section in consultation with the Invasive Species Council, consistent with the Invasive Species Management Plan and in cooperation with stakeholders, as appropriate, and, as approved by the Department of State, when Federal agencies are working with international organizations and foreign nations.

Section 3. *Invasive Species Council*

(a) An Invasive Species Council (Council) is hereby established whose members shall include the Secretary of State, the Secretary of the Treasury, the Secretary of Defense, the Secretary of the Interior, the Secretary of Agriculture, the Secretary of Commerce, the Secretary of Transportation, and the Administrator of the Environmental Protection Agency. The Council shall be Co-Chaired by the Secretary of the Interior, the Secretary of Agriculture, and the Secretary of Commerce. The Council may invite additional Federal agency representatives to be members, including representatives from sub-cabinet bureaus or offices with significant responsibilities concerning invasive species, and may prescribe special procedures for their participation. The Secretary of the Interior shall, with concurrence of the Co-Chairs, appoint an Executive Director of the Council and shall provide the staff and administrative support for the Council.

(b) The Secretary of the Interior shall establish an advisory committee under the Federal Advisory Committee Act, 5 U.S.C. App., to provide information and advice for consideration by the Council, and shall, after consultation with other members of the Council, appoint members of the advisory committee representing stakeholders. Among other things, the advisory committee shall recommend plans and actions at local, tribal, State, regional, and ecosystem-based levels to achieve the goals and objectives of the Management Plan in section 5 of this order. The advisory committee shall act in cooperation with stakeholders and existing organizations addressing invasive species. The Department of the Interior shall provide the administrative and financial support for the advisory committee.

Section 4. *Duties of the Invasive Species Council*

The Invasive Species Council shall provide national leadership regarding invasive species, and shall:

(a) oversee the implementation of this order and see that the Federal agency activities concerning invasive species are coordinated, complementary, cost-efficient, and effective, relying to the extent feasible and appropriate on existing organizations

evaluate and report on success in achieving the goals and objectives set forth in the Management Plan. The Management Plan shall identify the personnel, other resources, and additional levels of coordination needed to achieve the Management Plan's identified goals and objectives, and the Council shall provide each edition of the Management Plan and each report on it to the Office of Management and Budget. Within 18 months after measures have been recommended by the Council in any edition of the Management Plan, each Federal agency whose action is required to implement such measures shall either take the action recommended or shall provide the Council with an explanation of why the action is not feasible. The Council shall assess the effectiveness of this order no less than once each 5 years after the order is issued and shall report to the Office of Management and Budget on whether the order should be revised.

Section 6. *Judicial Review and Administration*

(b) This order is intended only to improve the internal management of the executive branch and is not intended to create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any other person.

(b) Executive Order 11987 of May 24, 1977, is hereby revoked.

(c) The requirements of this order do not affect the obligations of Federal agencies under 16 U.S.C. 4713 with respect to ballast water programs. (d) The requirements of section 2(a)(3) of this order shall not apply to any action of the Department of State or Department of Defense if the Secretary of State or the Secretary of Defense finds that exemption from such requirements is necessary for foreign policy or national security reasons.

/S/
William J. Clinton

THE WHITE HOUSE,
February 3, 1999
[FR Doc. 99-3184]

addressing invasive species, such as the Aquatic Nuisance Species Task Force, the Federal Interagency Committee for the Management of Noxious and Exotic Weeds, and the Committee on Environment and Natural Resources,

(b) encourage planning and action at local, tribal, State, regional, and ecosystem-based levels to achieve the goals and objectives of the Management Plan in section 5 of this order, in cooperation with stakeholders and existing organizations addressing invasive species,

(c) develop recommendations for international cooperation in addressing invasive species,

(d) develop, in consultation with the Council on Environmental Quality, guidance to Federal agencies pursuant to the National Environmental Policy Act on prevention and control of invasive species, including the procurement, use, and maintenance of native species as they affect invasive species,

(e) facilitate development of a coordinated network among Federal agencies to document, evaluate, and monitor impacts from invasive species on the economy, the environment, and human health,

(f) facilitate establishment of a coordinated, up-to-date information-sharing system that utilizes, to the greatest extent practicable, the Internet; this system shall facilitate access to and exchange of information concerning invasive species, including, but not limited to, information on distribution and abundance of invasive species; life histories of such species and invasive characteristics; economic, environmental, and human health impacts; management techniques, and laws and programs for management, research, and public education, and

(g) prepare and issue a National Invasive Species Management Plan as set forth in section 5 of this order.

Section 5. *Invasive Species Management Plan*

(a) Within 18 months after issuance of this order, the Council shall prepare and issue the first edition of a National Invasive Species Management Plan (Management Plan), which shall detail and recommend performance-oriented goals and objectives and specific measures of success for Federal agency efforts concerning invasive species. The Management Plan shall recommend specific objectives and measures for carrying out each of the Federal agency duties established in section 2(a) of this order and shall set forth steps to be taken by the Council to carry out the duties assigned to it under section 4 of this order. The Management Plan shall be developed through a public process and in consultation with Federal agencies and stakeholders.

(b) The first edition of the Management Plan shall include a review of existing and prospective approaches and authorities for preventing the introduction and spread of invasive species, including those for identifying path-ways by which invasive species are introduced and for minimizing the risk of introductions via those pathways, and shall identify research needs and recommend measures to minimize the risk that introductions will occur. Such recommended measures shall provide for a science-based process to evaluate risks associated with introduction and spread of invasive species and a coordinated and systematic risk-based process to identify, monitor, and interdict pathways that may be involved in the introduction of invasive species. If recommended measures are not authorized by current law, the Council shall develop and recommend to the President through its Co-Chairs legislative proposals for necessary changes in authority.

(c) The Council shall update the Management Plan biennially and shall concurrently

Enclosure 5

Subject: **Policy Statement on Invasive Alien Species**

April 22, 1999

From: /S/
The Secretary

To: Secretarial Officers
Heads of Operating Administrations

On February 3, 1999, President Clinton signed Executive Order 13112, which calls on Executive Branch agencies to work to prevent and control the introduction and spread of invasive species.

Nonnative flora and fauna can cause significant changes to ecosystems, upset the ecological balance, and cause serious economic harm to our nation's agricultural and recreational sectors. For example, in Guam, the brown tree snake, which was introduced from New Guinea by military aircraft during World War II, eliminated 9 of 11 species of native birds, has inflicted harmful bites, and, by climbing on power lines and into electronic equipment, has caused major power outages. Zebra mussels introduced into the Great Lakes in the ballast water of cargo ships have colonized water pipes, boat hulls, and other surfaces, wreaking havoc on water systems, transportation, and native shellfish. Introduced plants, such as kudzu in the southeastern states and purple loosestrife in the north, have choked out native plant species and, through them, wildlife and fish.

The Department of Transportation has been in the forefront of our national efforts to prevent and control the introduction of invasive species. The Coast Guard, the Maritime Administration and the St. Lawrence Seaway Development Corporation cooperate with the international community to prevent and control the introduction and spread of invasive aquatic species to the nation's waterways. The Federal Highway Administration works with other federal agencies and state governments to combat the introduction and spread of invasive species. The Federal Aviation Administration cooperates with other federal and state agencies in developing a comprehensive strategy to reduce the risk of introducing invasive species at airports in Hawaii; cooperates in federal research for screening baggage, cargo, and passengers; and protects native species in the management of its facilities and FAA-funded and licensed facilities throughout the country. The Federal Railroad Administration works with other federal agencies to reduce the risk from invasive species, including cooperating with the Department of Agriculture to lessen the opportunity for spreading karnal bunt, a serious crop disease, across international borders.

At its recently held triennial meeting, the Assembly of the International Civil Aviation Organization (ICAO) adopted a resolution, which was drafted by the Department, that will enable ICAO to assist other United Nations agencies in preventing the introduction of invasive species. The Assembly also called on its 185-member nations to support efforts to reduce the risk of introducing, through civil air transportation, potentially invasive species to areas outside the species' natural range.

I commend these efforts; however, the problem is formidable. Therefore, I direct the Secretarial offices and operating administrations to implement Executive Order 13112 by adhering to the attached policy statement.

Attachment:

DEPARTMENT OF TRANSPORTATION POLICY ON INVASIVE SPECIES

Background

Transportation systems facilitate the spread of species outside their natural range, both domestically and internationally. Of particular concern are those species that are likely to harm the environment, human health or economy.

In response to this concern, the Clinton Administration has mounted a national effort. On February 3, 1999, President Clinton issued Executive Order 13112, which calls for Executive Branch agencies to work to prevent the introduction and control the spread of invasive species and eliminate or minimize their associated economic, ecological and human health impacts.

The Department of Transportation's (DOT) efforts to prevent the introduction and spread of invasive species (a) are in keeping with the Department's strategic goals, which include both ensuring transportation safety and the protection and enhancement of the natural environment affected by transportation, (b) are in accord with its statutory mandate to protect against aquatic invasive species, (c) reflect Departmental participation on interagency committees, such as the Aquatic Nuisance Species Task Force, the Federal Interagency Committee for Management of Noxious and Exotic Weeds, the Native Plants Conservation Initiative, the Interagency Ecosystem Management Task Force, and the Interagency Working Group on Endangered Species, and (d) reflect compliance with the Presidential Memorandum on Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds.

Policy

The Department's policy is to fully participate in Administration efforts to prevent the introduction and spread of invasive species by:

a. pursuing appropriate authorities and funding for implementation;

b. participating on interagency committees;

c. analyzing invasive species' effects in accordance with Section 2 of Executive Order 13112;

d. increasing coordinated research;

e. implementing, at DOT facilities and DOT-funded facilities, the Presidential memorandum on beneficial landscaping;

e. coordinating with international organizations, such as the International Maritime Organization, the International Civil Aviation Organization, and the

International Organization for Standardization on cooperative efforts;

g. training agency personnel and informing the public;

h. coordinating with other federal agencies and with state, local and tribal governments; and

i. encouraging innovative designs for transportation equipment and systems.

Memorandum for the Heads of Executive Departments and Agencies of April 26, 1994

Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds

The Report of the National Performance Review contains recommendations for a series of environmental actions, including one to increase environmentally and economically beneficial landscaping practices at Federal facilities and federally funded projects. Environmentally beneficial landscaping entails utilizing techniques that complement and enhance the local environment and seek to minimize the adverse effects that the landscaping will have on it. In particular, this means using regionally native plants and employing landscaping practices and technologies that conserve water and prevent pollution.

These landscaping practices should benefit the environment, as well as generate long-term costs savings for the Federal Government. For example, the use of native plants not only protects our natural heritage and provides wildlife habitat, but also can reduce fertilizer, pesticide, and irrigation demands and their associated costs because native plants are suited to the local environment and climate.

Because the Federal Government owns and landscapes large areas of land, our stewardship presents a unique opportunity to provide leadership in this area and to develop practical and cost-effective methods to preserve and protect that which has been entrusted to us. Therefore, for Federal grounds, Federal projects, and federally funded projects, I direct that agencies shall, where cost-effective and to the extent practicable:

(a) Use regionally native plants for landscaping;

(b) Design, use, or promote construction practices that minimize adverse effects on the natural habitat;

(c) Seek to prevent pollution by, among other things, reducing fertilizer and pesticide use, using integrated pest management techniques, recycling green waste, and minimizing runoff. Landscaping practices that reduce the use of toxic chemicals provide one approach for agencies to reach reduction goals established in Executive Order No. 12856 ``Federal Compliance with Right-To-Know Laws and Pollution Prevention Requirements;''

(d) Implement water-efficient practices, such as the use of mulches, efficient irrigation systems, audits to determine exact landscaping water-use needs, and recycled or reclaimed water and the selecting and siting of plants in a manner that conserves water and controls soil erosion. Landscaping practices, such as planting regionally native shade trees around buildings to reduce air conditioning demands, can also provide innovative measures to meet the energy consumption reduction goal established in Executive Order No. 12902, ``Energy Efficiency and Water Conservation at Federal Facilities;'' and

(e) Create outdoor demonstrations incorporating native plants, as well as pollution prevention and water conservation techniques, to promote awareness of the environmental and economic benefits of implementing this directive. Agencies are encouraged to develop other methods for sharing information on landscaping advances with interested non-Federal parties.

In order to assist agencies in implementing this directive the Federal Environmental Executive shall:

(a) Establish an interagency working group to develop recommendations for guidance, including compliance with the requirements of the National Environmental Policy Act, 42 U.S.C.4321, 4331-4335, and 4341-4347, and

training needs to implement this directive. The recommendations are to be developed by November 1994; and

(b) Issue the guidance by April 1995.To the extent practicable, agencies shall incorporate this guidance into their landscaping programs and practices by February 1996. In addition, the Federal Environmental Executive shall establish annual awards to recognize outstanding landscaping efforts of agencies and individual employees. Agencies are encouraged to recognize exceptional performance in the implementation of this directive through their awards programs. Agencies shall advise the Federal Environmental Executive by April 1996 on their progress in implementing this directive. To enhance landscaping options and awareness, the Department of Agriculture shall conduct research on the suitability, propagation, and use of native plants for landscaping. The Department shall make available to agencies and the public the results of this research.

/ S /
William J. Clinton

THE WHITE HOUSE,
April 26, 1994

STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE
DIVISION OF PLANT HEALTH & PEST PREVENTION SERVICES

January 6, 1999

IMPORTANT NOTICE

This list replaces the IMPORTANT NOTICE of January 6, 1998 and the Noxious Weeds Section of the Consolidated Pest Rating Booklet issued November 21, 1977.

All ratings are based upon information currently available and are subject to change as new information is developed or new weed species are discovered and evaluated. The only "C" rated species on the list are those that are designated noxious weeds in the California Code of Regulations, Title 3, Sections 3854, 3855, and 4500. Species rated "Q" are in accordance with the Assistant Director for Plant Industry Memorandum of January 1, 1980, entitled "Action Oriented Rating System", and Plant Industry Policy Letter 89-2, dated May 1, 1989.

Changes this year include one nomenclatural update and three additions to the list of Q-rated taxa.

The single nomenclatural update clarifies the misapplication of *Physalis virginiana* var. *sonorae* to *P. longifolia*. As a result, *P. virginiana* var. *sonorae* has been removed from this list and *P. longifolia* substituted. *Physalis longifolia* is currently listed in the Jepson Manual - Higher Plants of California and is the plant that was originally found in 1965 and again in 1967 in the Montague region of Siskiyou County. The common name is long-leaf groundcherry.

Additions to the Q-rated list are: *Rorippa sylvestris* (creeping yellow field cress), *Ononis alopecuroides* (foxtail restharrow), and *Limnobium laevigatum* (South American spongeplant).

Discussions with agency personnel and university botanists concluded that there existed a need for greater systematic specificity and information about all the rated taxa. As a beginning, names on List 1 now include authorities for the nomenclatural combinations plus more precise systematic detail and explanatory notation. Future lists will eventually contain complete synonomy and reference citations. The taxonomic authorities for Federally listed noxious weeds are provided on List 5. Authorship citations follow the Kew Abbreviation (Brummitt, R. K. and C. E. Powell, 1992. "Authors of Plant Names", Royal Botanic Gardens, Kew). An newly added sixth list provides the geographic origin of all California listed pest plant species.

Explanations or taxonomic names immediately below a listed name are provided in technical format in order to communicate precisely and accurately alternative nomenclatural applications. True taxonomic or nomenclatural synonyms are supplied in parentheses; later homonyms are referenced by the use of "non" between two alternative taxonomic authorities, with the first being responsible for the name applied in a given instance; misapplied non-synonyms are cited using "auct. non ___" between the epithet and taxonomic authority, meaning "in the sense used by other authors not in the sense of ___". The former cases (synonymy or homonymy) reference the taxon via a different taxonomic concept, an invalid name, or both. The latter misapplied names remain appropriately applied to a different taxon, although the validity or appropriate application of those names is not implied and must be assessed independently. The term "nec" indicates a third homonym was available; the term is equivocal to the English "also not" or "nor". The use of "sensu lato" means "in the broad taxonomic sense", while "pro parte" indicates that only a portion of the alternative taxon's variation is referable to the accepted name.

In the interest of spatial economy, only List 1 provides the above systematic details and explanatory notes. Users of Lists 2-6 should refer to List 1 for these data.

Timely IMPORTANT NOTICES will announce additions and changes to this list, which will become obsolete upon the issuance of the next revision scheduled for January 5, 2000.

G. Frederic Hrusa, Ph.D., Senior Plant Systematist
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STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE
DIVISION OF PLANT HEALTH & PEST PREVENTION SERVICES

PEST RATINGS OF NOXIOUS WEED SPECIES AND NOXIOUS WEED SEED

List 1. ALPHABETICAL BY SCIENTIFIC NAME

RATING	SCIENTIFIC NAME	COMMON NAME
B	*Acacia paradoxa* DC. [*A. armata* R. Br.]	kangaroothorn
A	*Acaena novae-zelandiae* Kirk [*A. anserinifolia* auct. non (J.R. Forst. & G. Forst.) Druce pro parte]	biddy-biddy
A	*Acaena pallida* (Kirk) Allan [*A. anserinifolia* auct. non (J.R. Forst. & G. Forst.) Druce pro parte]	pale biddy-biddy
A	*Achnatherum brachychaetum* (Godr.) Barkworth [*Stipa brachychaeta* Godr.]	punagrass
B	*Acroptilon repens* (L.) DC. [*Centaurea repens* L.]	Russian knapweed
B	*Aegilops cylindrica* Host	jointed goatgrass
B	*Aegilops ovata* L. non Roth in Usteri nec Nevski (sensu) [*A. geniculata* Roth which = *A. ovata* Nevski non L. nec Roth in Usteri; *A. neglecta* Req. ex Bertol.; Calif. plants referable to *A. geniculata* Roth sensu stricto]	ovate goatgrass
B	*Aegilops triuncialis* L.	barb goatgrass
B	*Aeschynomene rudis* Benth.	rough jointvetch
A	*Alhagi pseudalhagi* (M. Bieb.) Desv. [*A. maurorum* Medik. pro parte. Pending further interpretation this may become the applied name]	camelthorn
B	*Allium paniculatum* L.	panicled onion
B	*Allium vineale* L.	wild garlic
A	*Alternanthera philoxeroides* (Mart.) Griseb.	alligatorweed
B	*Ambrosia trifida* L.	giant ragweed
B	*Araujia sericifera* Brot. [*A. sericofera* (orthographic variant, see Forster & Bruyns, 1992, Taxon 41:746-749); sometimes sold as *Schubertia albens* auct. (nomen nudum)]	bladderflower
A	*Arctotheca calendula* Hawksw. & Wiens [as seed or fertile plants]	capeweed
B	*Cardaria chalepensis* (L.) Hand.-Mazz.	lens-podded hoarycress
B	*Cardaria draba* (L.) Desv.	heart-podded hoarycress

RATING	SCIENTIFIC NAME	COMMON NAME
B	*Cardaria pubescens* (C.A. Mey.) Jarmol.	globe-podded hoarycress
A	*Carduus acanthoides* L.	plumeless thistle
A	*Carduus nutans* L. sensu lato [includes *C. leiophyllus* Petrovic; *C. n.* var. *leiophyllus* (Petrovic) auct. (a nomen nudum mistakenly attributed to Arenes); *C. n.* subsp. *leiophyllus* (Petrovic) Stoj. & Stef.; *C. thoermeri* Weinm.]	musk thistle
C	*Carduus pycnocephalus* L.	Italian thistle
C	*Carduus tenuiflorus* Curtis	slenderflowered thistle
B	*Carthamus baeticus* (Boiss. & Reut.) Nyman	smooth distaff thistle
B	*Carthamus lanatus* L.	woolly distaff thistle
A	*Carthamus leucocaulos* Sibth. & Sm.	whitestem distaff thistle
C	*Cenchrus echinatus* L.	southern sandbur
C	*Cenchrus incertus* M. Curtis	coast sandbur
C	*Cenchrus longispinus* (Hackel) Fernald [*C. pauciflorus* auct. non Benth.]	mat sandbur
B	*Centaurea calcitrapa* L.	purple starthistle
A	*Centaurea diffusa* Lam.	diffuse knapweed
A	*Centaurea iberica* Spreng.	Iberian starthistle
A	*Centaurea maculosa* Lam.	spotted knapweed
C	*Centaurea solstitialis* L.	yellow starthistle
A	*Centaurea squarrosa* Willd. non Roth [*C. virgata* Lam. non Port. ex Nyman var. *squarrosa* (Willd.) Boiss., non *C. squarrosa* Roth (*Catalecta fasc. ii., p.118. 1800*)]	squarrose knapweed
B	*Centaurea sulphurea* Willd. [*C. sicula* sensu auct. Ca. non L.]	Sicilian starthistle
A	*Chondrilla juncea* L.	skeletonweed
B	*Chorispora tenella* (Pall.) DC.	purple mustard
B	*Cirsium arvense* (L.) Scop.	Canada thistle
A	*Cirsium ochrocentrum* A. Gray	yellowspine thistle
A	*Cirsium undulatum* (Nutt.) Spreng.	wavyleaf thistle
C	*Convolvulus arvensis* L.	field bindweed
B	*Coronopus squamatus* (Forskall) Asch.	swinecress

RATING	SCIENTIFIC NAME	COMMON NAME
A	*Crupina vulgaris* Cass.	bearded creeper
A	*Cucumis melo* L. var. *dudaim* (L.) Naudin	dudaim melon
B	*Cucumis myriocarpus* Naudin	paddy melon
A	*Cuscuta reflexa* Roxb.	giant dodder
C	*Cuscuta* spp. [except *C. reflexa* Roxb.]	dodder
B	*Cynara cardunculus* L.	artichoke thistle
C	*Cynodon* spp. & hybrids	bermudagrasses
B	*Cyperus esculentus* L.	yellow nutsedge
B	*Cyperus rotundus* L.	purple nutsedge
C	*Cytisus scoparius* (L.) Link	Scotch broom
B	*Elytrigia repens* (L.) Desv. [*Agropyron repens* (L.) P. Beauv.]	quackgrass
A	*Euphorbia esula* L.	leafy spurge
B	*Euphorbia oblongata* Griseb. [*E. platyphylla* sensu auct. Ca. non L.]	oblong spurge
A	*Euphorbia serrata* L.	serrate spurge
B	*Gaura coccinea* Pursh [(*G. odorata* Sesse ex Lag.); native to California; may invade rangelands]	scarlet gaura
B	*Gaura drummondii* (Spach) Torr. & A. Gray [*G. odorata* auct. non Sesse ex Lag.]	Drummond's gaura
B	*Gaura sinuata* Ser.	wavy-leaved gaura
C	*Genista monspessulana* (L.) L.A.S. Johnson [*Cytisus monspessulanus* L.]	French broom
B	*Gypsophila paniculata* L. sensu lato [includes *G. p.* var. *hungarica* Borbás]	baby's breath
A	*Halimodendron halodendron* (L.) Voss	Russian salt tree
A	*Halogeton glomeratus* (M. Bieb.) C.A. Mey.	halogeton
A	*Helianthus ciliaris* DC.	blueweed
A	*Heteropogon contortus* (L.) Roem. & Schult.	tanglehead
A	*Hydrilla verticillata* (L.f.) Royle	hydrilla
C	*Hyoscyamus niger* L.	black henbane

RATING	SCIENTIFIC NAME	COMMON NAME
C	*Hypericum perforatum* L.	Klamathweed
B	*Imperata brevifolia* Vasey	satintail
C	*Iris douglasiana* Herb.	Douglas iris
C	*Iris missouriensis* Nutt.	western blue flag
B	*Isatis tinctoria* L.	dyer's woad
C	*Iva axillaris* Pursh sensu lato [includes *I. a.* var. *robustior* Hook.; *I. a.* subsp. *robustior* (Hook.) Bassett]	povertyweed
B	*Lepidium latifolium* L.	perennial peppercress
Q	*Limnobium laevigatum* (Humb. & Bonpl. ex Willd.) Heine [*L. spongia* Ca. auct. non Bosc. & Steud.; *L. spongia* subsp. *laevigatum* (Humb. & Bonpl. ex Willd.) Lowden; *Hydromystria laevigata* (Humb. & Bonpl. ex Willd.) Hunz.]	
A	*Linaria genistifolia* (L.) Mill. subsp. *dalmatica* (L.) Maire & Petitm. [*L. dalmatica* L.]	Dalmatian toadflax
B	*Lythrum salicaria* L.	purple loosestrife
C	*Malvella leprosa* (Ortega) Krapov. [*Sida leprosa* (Ortega) K. Schum. var. *hederacea* (Douglas ex Hook.) K. Schum.]	alkali mallow
B	*Muhlenbergia schreberi* S. Gmelin	nimblewill
B	*Nothoscordum inodorum* (Ait.) G. Nicholson [*Allium neapolitanum* auct. non Cirillo pro parte; *Allium inodorum* Ait.]	false garlic
B	*Nymphaea mexicana* Zucc.	banana waterlily
Q	*Ononis alopecuroides* L. [*O. salzmanniana* Boiss. & Reut. non sensu Ivimey-Cook in Flora Europaea V. 2, 1968]	foxtail restharrow
A	*Onopordum acanthium* L. sensu lato [numerous infraspecific taxa recognized in the old world, of which to date only the typical has been found in N. America]	Scotch thistle
A	*Onopordum illyricum* L.	Illyrian thistle
A	*Onopordum tauricum* Willd.	Taurian thistle
A	*Orobanche cooperi* (A. Gray) A. Heller [*O. ludoviciana* Nutt. var. *cooperi* (A. Gray) Beck; *O. ludoviciana* var. *latiloba* Munz] [native to California; may parasitize agricultural crops]	Cooper's broomrape
A	*Orobanche ramosa* L.	branched broomrape
B	*Oryza rufipogon* Griff. [non *Oryza sativa* L. forma "spontanea" sensu auct. (nomen nudum)]	perennial wild red rice

RATING	SCIENTIFIC NAME	COMMON NAME
B	*Panicum antidotale* Retz.	blue panicgrass
A	*Peganum harmala* L.	harmel
C	*Pennisetum clandestinum* Chiov.	Kikuyugrass
A	*Physalis longifolia* Nutt. [*Physalis virginiana* Mill. var. *sonorae* auct. non (Torr.) Waterf.]	long-leaf groundcherry
B	*Physalis viscosa* L.	grape groundcherry
C	*Polygonum amphibium* L. var. *emersum* Michx. [*P. coccineum* Muhl. ex Willd.]	kelp
B	*Polygonum cuspidatum* Siebold & Zucc.	Japanese knotweed
B	*Polygonum polystachyum* C.F.W. Meissn.	Himalayan knotweed
B	*Polygonum sachalinense* Maxim.	giant knotweed
A	*Prosopis strombulifera* (Lam.) Benth.	creeping mesquite
B	*Rorippa austriaca* (Crantz) Besser	Austrian field cress
C	*Salsola tragus* L. [*S. australis* R. Br.; *S. iberica* (Sennen & Pau) Botsch.; *S. kali* auct. non L.; *S. ruthenica* Iljin in B. Keller et al. as used in numerous references; *S. pestifer* A. Nelson; all cf. Mosyakin, S.L., Ann. Missouri. Bot. Gard. 83: 387-395. 1996]	common Russianthistle
Q	*Salsola collina* Benth.	spineless Russianthistle
C	*Salsola paulsenii* L.	barbwire Russianthistle
A	*Salsola damascena* Botsch. [*S. vermiculata* L. pro parte]	wormleaf salsola
B	*Salvia aethiopis* L.	Mediterranean sage
A	*Salvia virgata* L. [*S. pratensis* auct. non L. pro parte]	southern meadow sage
Q	*Salvinia auriculata* Aubl. sensu lato [includes *S. auriculata* Aubl.; *S. biloba* Raddi; *S. herzogii* de la Sota; and *S. molesta* D.S. Mitch.]	salvinia
A	*Scolymus hispanicus* L.	golden thistle
B	*Senecio jacobaea* L.	tansy ragwort
B	*Senecio squalidus* L.	Oxford ragwort
B	*Setaria faberi* R. Herrm.	giant foxtail
A	*Solanum cardiophyllum* L.	heartleaf nightshade
B	*Solanum carolinense* L.	Carolina horsenettle

RATING	SCIENTIFIC NAME	COMMON NAME
A	*Solanum dimidiatum* Raf.	Torrey's nightshade
B	*Solanum elaeagnifolium* Cav.	white horsenettle
B	*Solanum lanceolatum* Cav.	lanceleaf nightshade
B	*Solanum marginatum* L.f.	white-margined nightshade
A	*Sonchus arvensis* L.	perennial sowthistle
C	*Sorghum halepense* (L.) Pers. [applies also to other perennial *Sorghum* spp. including but not limited to *Sorghum almum* Parodi]	Johnsongrass
A	*Sphaerophysa salsula* (Pall.) DC.	Austrian peaweed
A	*Striga asiatica* (L.) Kuntze [*S. lutea* Lour.]	witchweed
B	*Symphytum asperum* Lepechin	rough comfrey
C	*Taeniatherum caput-medusae* (L.) Nevski [*Elymus caput-medusae* L.; *T. asperum* auct. non (Simonk.) Nevski]	medusahead
A	*Tagetes minuta* L.	wild marigold
C	*Tribulus terrestris* L.	puncturevine
B	*Ulex europaeus* L.	gorse
B	*Viscum album* L.	European mistletoe
A	*Zygophyllum fabago* L. [*Z. f.* var. *brachycarpum* auct. non Boiss.]	Syrian beancaper

List 2. FEDERAL NOXIOUS WEED REGULATION. 7 CFR 360

The following plants, seeds, or other parts capable of propagation are within the definition of a "noxious weed" under the Federal Noxious Weed Act of 1974 (7 USC 2802(c)). Listed noxious weeds may be moved into or through the United States only under permit from the USDA Plant Protection and Quarantine programs, and under conditions that would not involve a danger of disseminating the weeds.

a. Aquatic Weeds:

Azolla pinnata
Eichhornia azurea
Hydrilla verticillata
Hygrophila polysperma
Ipomoea aquatica
Lagarosiphon major
Limnophila sessiliflora
Monochoria hastata
Monochoria vaginalis
Ottelia alismoides
Sagittaria sagittifolia
Salvinia auriculata
Salvinia biloba
Salvinia herzogii
Salvinia molesta
Sparganium erectum

b. Parasitic Weeds:

Aeginetia spp.
Alectra spp.
Cuscuta spp. (See 7 CFR 360.200 for 53 exceptions)
Orobanche spp. (See 7 CFR 360.200 for 13 exceptions)
Striga spp.

c. Terrestrial Weeds:

Ageratina adenophora
Alternanthera sessilis
Asphodelus fistulosus
Avena sterilis (including A. ludoviciana)
Borreria alata
Carthamus oxyacantha
Chrysopogon aciculatus
Commelina benghalensis
Crupina vulgaris
Digitaria scalarum
Digitaria velutina
Drymaria arenarioides
Emex australis
Emex spinosa
Galega officinalis

Federal Noxious Weed Regulation (Continued)

Heracleum mantegazzianum
Imperata brasiliensis
Imperata cylindrica
Ipomoea triloba
Ischaemum rugosum
Leptochloa chinensis
Lycium ferocissimum
Melaleuca quinquenervia
Melastoma malabathricum
Mikania cordata
Mikania micrantha
Mimosa invisa
Mimosa pigra var. pigra
Nassella trichotoma
Opuntia aurantiaca
Oryza longistaminata
Oryza punctata
Oryza rufipogon
Paspalum scrobiculatum
Pennisetum clandestinum
Pennisetum macrourum
Pennisetum pedicellatum
Pennisetum polystachion
Prosopis alpataco
Prosopis argentina
Prosopis articulata
Prosopis burkartii
Prosopis caldenia
Prosopis calingastana
Prosopis campestris
Prosopis castellanosii
Prosopis denudans
Prosopis elata
Prosopis farcta
Prosopis ferox
Prosopis fiebrigii
Prosopis hassleri
Prosopis humilis
Prosopis kuntzei
Prosopis pallida
Prosopis palmeri
Prosopis reptans
Prosopis rojasiana
Prosopis ruizleali
Prosopis ruscifolia
Prosopis sericantha
Prosopis strombulifera
Prosopis torquata
Rottboellia exaltata
Rubus fruticosus
Rubus moluccanus
Saccharum spontaneum
Salsola vermiculata
Setaria pallide-fusca
Solanum torvum
Solanum viarum
Tridax procumbens
Urochloa panicoides

STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE
DIVISION OF PLANT HEALTH & PEST PREVENTION SERVICES

PEST RATINGS OF NOXIOUS WEED SPECIES
AND NOXIOUS WEED SEED

List 3. BY PEST RATING

"A"- Eradication, containment, rejection, or other holding action at the state-county level. Quarantine interceptions to be rejected or treated at any point in the state.

Acaena novae-zelandiae	biddy-biddy
Acaena pallida	pale biddy-biddy
Achnatherum brachychaetum	punagrass
Alhagi pseudalhagi	camelthorn
Alternanthera philoxeroides	alligatorweed
Arctotheca calendula	capeweed
Carduus acanthoides	plumeless thistle
Carduus nutans	musk thistle
Carthamus leucocaulos	whitestem distaff thistle
Centaurea diffusa	diffuse knapweed
Centaurea iberica	Iberian starthistle
Centaurea maculosa	spotted knapweed
Centaurea squarrosa	squarrose knapweed
Chondrilla juncea	skeletonweed
Cirsium ochrocentrum	yellowspine thistle
Cirsium undulatum	wavyleaf thistle
Crupina vulgaris	bearded creeper
Cucumis melo var. *dudaim*	dudaim melon
Cuscuta reflexa	giant dodder
Euphorbia esula	leafy spurge
Euphorbia serrata	serrate spurge
Halimodendron halodendron	Russian salttree
Halogeton glomeratus	halogeton

"A" - Pests Continued

Helianthus ciliaris	blueweed
Heteropogon contortus	tanglehead
Hydrilla verticillata	hydrilla
Linaria genistifolia spp. *dalmatica*	Dalmatian toadflax
Onopordum acanthium	Scotch thistle
Onopordum tauricum	Taurian thistle
Onopordum illyricum	Illyrian thistle
Orobanche cooperi	Cooper's broomrape
Orobanche ramosa	branched broomrape
Peganum harmala	harmel
Physalis longifolia	long-leaf groundcherry
Prosopis strombulifera	creeping mesquite
Salsola damascena	wormleaf salsola
Salvia virgata	southern meadow sage
Scolymus hispanicus	golden thistle
Solanum cardiophyllum	heartleaf nightshade
Solanum dimidiatum	Torrey's nightshade
Sonchus arvensis	perennial sowthistle
Sphaerophysa salsula	Austrian peaweed
Striga asiatica	witchweed
Tagetes minuta	wild marigold
Zygophyllum fabago	Syrian beancaper

"B" - Eradication, containment, control or other holding action at the discretion of the commissioner.

Acacia paradoxa	kangaroothorn
Acroptilon repens	Russian knapweed
Aegilops cylindrica	jointed goatgrass
Aegilops ovata	

"B" - Pests Continued

Aegilops triuncialis	barb goatgrass
Aeschynomene rudis	rough jointvetch
Allium paniculatum	panicled onion
Allium vineale	wild garlic
Ambrosia trifida	giant ragweed
Araujia sericifera	bladderflower
Cardaria chalepensis	lens-podded hoarycress
Cardaria draba	heart-podded hoarycress
Cardaria pubescens	globe-podded hoarycress
Carthamus baeticus	smooth distaff thistle
Carthamus lanatus	woolly distaff thistle
Centaurea calcitrapa	purple starthistle
Centaurea sulphurea	Sicilian thistle
Chorispora tenella	purple mustard
Cirsium arvense	Canada thistle
Coronopus squamatus	swinecress
Cucumis myriocarpus	paddy melon
Cynara cardunculus	artichoke thistle
Cyperus esculentus	yellow nutsedge
Cyperus rotundus	purple nutsedge
Elytrigia repens	quackgrass
Euphorbia oblongata	oblong spurge
Gaura coccinea	scarlet gaura
Gaura drummondii	Drummond's gaura
Gaura sinuata	wavy-leaved gaura
Gypsophila paniculata	baby's breath
Imperata brevifolia	satintail

"B" - Pests Continued

Isatis tinctoria	dyer's woad
Lepidium latifolium	perennial peppercress
Lythrum salicaria	purple loosestrife
Muhlenbergia schreberi	nimblewill
Nothoscordum inodorum	false garlic
Nymphaea mexicana	banana waterlily
Oryza rufipogon	perennial wild red rice
Panicum antidotale	blue panicgrass
Physalis viscosa	grape groundcherry
Polygonum cuspidatum	Japanese knotweed
Polygonum polystachyum	Himalayan knotweed
Polygonum sachalinense	giant knotweed
Rorippa austriaca	Austrian field cress
Salvia aethiopis	Mediterranean sage
Senecio jacobaea	tansy ragwort
Senecio squalidus	Oxford ragwort
Setaria faberi	giant foxtail
Solanum carolinense	Carolina horsenettle
Solanum elaeagnifolium	white horsenettle
Solanum lanceolatum	lanceleaf nightshade
Solanum marginatum	white-margined nightshade
Symphytum asperum	rough comfrey
Ulex europaeus	gorse
Viscum album	European mistletoe

"C" - State endorsed holding action and eradication only when found in a nursery; action to retard spread outside of nurseries at the discretion of the commissioner; reject only when found in a cropseed for planting or at the discretion of the commissioner.

Carduus pycnocephalus	Italian thistle
Carduus tenuiflorus	slenderflowered thistle
Cenchrus echinatus	southern sandbur
Cenchrus incertus	coast sandbur
Cenchrus longispinus	mat sandbur
Centaurea solstitialis	yellow starthistle
Convolvulus arvensis	field bindweed
Cuscuta spp. except *C. reflexa*	dodder
Cynodon spp. and hybrids	bermudagrass
Cytisus scoparius	Scotch broom
Genista monspessulana	French broom
Hyoscyamus niger	black henbane
Hypericum perforatum	Klamathweed
Iris douglasiana	Douglas iris
Iris missouriensis	western blue flag
Iva axillaris	poverty weed
Malvella leprosa	alkali mallow
Pennisetum clandestinum	Kikuyugrass
Polygonum amphibium var. *emersum*	kelp
Salsola tragus	common Russianthistle
Salsola paulsenii	barbwire Russianthistle
Sorghum halepense	Johnsongrass
Taeniatherum caput-medusae	medusahead
Tribulus terrestris	puncturevine

"Q" - Temporary "A" action outside of nurseries at the state-county level pending determination of a permanent rating.

Limnobium laevigatum	S. American spongeplant
Ononis alopecuroides	foxtail restharrow
Rorippa sylvestris	creeping yellow field cress
Salsola collina	spineless Russianthistle
Salvinia auriculata complex	salvinia

STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE
DIVISION OF PLANT HEALTH & PEST PREVENTION SERVICES

PEST RATINGS OF NOXIOUS WEED SPECIES
AND NOXIOUS WEED SEED

List 4. ALPHABETICAL BY COMMON NAME

RATING	COMMON NAME	SCIENTIFIC NAME
A	alligatorweed	*Alternanthera philoxeroides*
B	baby's breath	*Gypsophila paniculata*
A	beancaper, Syrian	*Zygophyllum fabago*
A	bearded creeper	*Crupina vulgaris*
C	bermudagrass	*Cynodon* spp. and hybrids
A	biddy biddy	*Acaena novae-zelandiae*
A	biddy biddy, pale	*Acaena pallida*
C	bindweed, field	*Convolvulus arvensis*
B	bladderflower	*Araujia sericifera*
A	blueweed	*Helianthus ciliaris*
C	broom, French	*Genista monspessulana*
C	broom, Scotch	*Cytisus scoparius*
A	broomrape, branched	*Orobanche ramosa*
A	broomrape, Cooper's	*Orobanche cooperi*
A	broomrape, desert	*Orobanche cooperi*
A	camelthorn	*Alhagi pseudalhagi*
A	capeweed	*Arctotheca calendula*
B	comfrey, rough	*Symphytum asperum*
A	crupina, common	*Crupina vulgaris*
B	distaff thistle, smooth	*Carthamus baeticus*
A	distaff thistle, whitestem	*Carthamus leucocaulos*

RATING	COMMON NAME	SCIENTIFIC NAME
B	distaff thistle, woolly	*Carthamus lanatus*
C	dodder, all species except giant dodder	*Cuscuta* spp.
A	dodder, giant	*Cuscuta reflexa*
B	dyer's woad	*Isatis tinctoria*
B	field cress, Austrian	*Rorippa austriaca*
Q	field cress, creeping yellow	*Rorippa sylvestris*
C	flag, western blue	*Iris missouriensis*
B	foxtail, giant	*Setaria faberi*
B	garlic, false	*Nothoscordum inodorum*
B	garlic, wild	*Allium vineale*
B	gaura, scarlet	*Gaura coccinea*
B	gaura, Drummond's	*Gaura drummondii*
B	gaura, wavy-leaved	*Gaura sinuata*
B	goatgrass, barb	*Aegilops triuncialis*
B	goatgrass, jointed	*Aegilops cylindrica*
B	goatgrass, ovate	*Aegilops ovata*
B	gorse	*Ulex europaeus*
B	groundcherry, grape	*Physalis viscosa*
A	groundcherry, long-leaf	*Physalis longifolia*
A	halogeton	*Halogeton glomeratus*
A	harmel	*Peganum harmala*
C	henbane, black	*Hyoscyamus niger*
B	hoarycress, globe-podded	*Cardaria pubescens*
B	hoarycress, heart-podded	*Cardaria draba*
B	hoarycress, lens-podded	*Cardaria chalepensis*
B	horsenettle, Carolina	*Solanum carolinense*
B	horsenettle, white	*Solanum elaeagnifolium*
A	hydrilla	*Hydrilla verticillata*

RATING	COMMON NAME	SCIENTIFIC NAME
C	iris, Douglas	*Iris douglasiana*
C	iris, western blue flag	*Iris missouriensis*
C	Johnsongrass	*Sorghum halepense*
B	jointvetch, rough	*Aeschynomene rudis*
B	kangaroothorn	*Acacia paradoxa*
C	kelp	*Polygonum amphibium* var. *emersum*
C	kikuyugrass	*Pennisetum clandestinum*
C	Klamathweed	*Hypericum perforatum*
A	knapweed, diffuse	*Centaurea diffusa*
B	knapweed, Russian	*Acroptilon repens*
A	knapweed, spotted	*Centaurea maculosa*
A	knapweed, squarrose	*Centaurea squarrosa*
B	knotweed, giant	*Polygonum sachalinense*
B	knotweed, Himalayan	*Polygonum polystachyum*
B	loosestrife, purple	*Lythrum salicaria*
B	knotweed, Japanese	*Polygonum cuspidatum*
C	mallow, alkali	*Malvella leprosa*
A	marigold, wild	*Tagetes minuta*
C	medusahead	*Taeniatherum caput-medusae*
A	melon, dudaim	*Cucumis melo* var. *dudaim*
B	melon, paddy	*Cucumis myriocarous*
A	mesquite, creeping	*Prosopis strombulifera*
B	mistletoe, European	*Viscum album*
B	mustard, purple	*Chorispora tenella*
A	nightshade, heartleaf	*Solanum cardiophyllum*
B	nightshade, lanceleaf	*Solanum lanceolatum*
A	nightshade, Torrey's	*Solanum dimidiatum*
B	nightshade, white-margined	*Solanum marginatum*

RATING	COMMON NAME	SCIENTIFIC NAME
B	nimblewill	*Muhlenbergia schreberi*
B	nutsedge, purple	*Cyperus rotundus*
B	nutsedge, yellow	*Cyperus esculentus*
B	onion, panicled	*Allium paniculatum*
A	peaweed, Austrian	*Sphaerophysa salsula*
B	peppercress, perennial	*Lepidium latifolium*
C	povertyweed	*Iva axillaris*
A	punagrass	*Achnatherum brachychaetum*
C	puncturevine	*Tribulus terrestris*
B	quackgrass	*Elytrigia repens*
B	ragweed, giant	*Ambrosia trifida*
B	ragwort, Oxford	*Senecio squalidus*
B	ragwort, tansy	*Senecio jacobaea*
Q	restharrow, foxtail	*Ononis alopecuroides*
B	rice, red	*Oryza rufipogon*
C	Russianthistle, barbwire	*Salsola paulsenii*
C	Russianthistle, common	*Salsola tragus*
Q	Russianthistle, spineless	*Salsola collina*
C	St. Johnswort (as *Hypericum perforatum*)	see Klamathweed
A	sage, meadow	*Salvia virgata*
B	sage, Mediterranean	*Salvia aethiopis*
A	salsola, wormleaf	*Salsola vermiculata*
A	salttree, Russian	*Halimodendron halodendron*
Q	salvinia	*Salvinia auriculata* complex
C	sandbur, coast	*Cenchrus incertus*
C	sandbur, mat	*Cenchrus longispinus*
C	sandbur, southern	*Cenchrus echinatus*
B	satintail	*Imperata brevifolia*

RATING	COMMON NAME	SCIENTIFIC NAME
B	Sicilian starthistle	*Centaurea sulphurea*
A	skeletonweed	*Chondrilla juncea*
A	sowthistle, perennial	*Sonchus arvensis*
Q	spongeplant, S. American	*Limnobium laevigatum*
A	spurge, leafy	*Euphorbia esula*
B	spurge, oblong	*Euphorbia oblongata*
A	spurge, serrate	*Euphorbia serrata*
A	starthistle, Iberian	*Centaurea iberica*
B	starthistle, purple	*Centaurea calcitrapa*
B	starthistle, Sicilian	*Centaurea sulphurea*
C	starthistle, yellow	*Centaurea solstitialis*
B	swinecress	*Coronopus squamatus*
A	tanglehead	*Heteropogon contortus*
B	thistle, artichoke	*Cynara cardunculus*
B	thistle, Canada	*Cirsium arvense*
B	thistle, distaff, smooth	*Carthamus baeticus*
A	thistle, distaff, whitestem	*Carthamus leucocaulos*
B	thistle, distaff, woolly	*Carthamus lanatus*
A	thistle, golden	*Scolymus hispanicus*
A	thistle, Illyrian	*Onopordum illyricum*
C	thistle, Italian (see also "thistle, slenderflowered")	*Carduus pycnocephalus*
A	thistle, musk	*Carduus nutans*
A	thistle, plumeless	*Carduus acanthoides*
A	thistle, Scotch	*Onopordum acanthium*
C	thistle, slenderflowered	*Carduus tenuiflorus*
A	thistle, Taurian	*Onopordum tauricum*
A	thistle, wavyleaf	*Cirsium undulatum*

A	thistle, yellowspine	*Cirsium ochrocentrum*
A	toadflax, Dalmatian	*Linaria genistifolia* ssp. *dalmatica*
B	waterlily, banana	*Nymphaea mexicana*
A	witchweed	*Striga asiatica*

STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE
DIVISION OF PLANT HEALTH & PEST PREVENTION SERVICES
PEST RATINGS OF NOXIOUS WEED SPECIES

List 5. ALPHABETICAL BY DIVISION, CLASS, FAMILY, GENUS, SPECIES, WITH AUTHORITIES FOR THE BINOMIALS

SCIENTIFIC NAME	COMMON NAME	RATING
FILICOPHYTA — ferns		
SALVINIACEAE		
Azolla pinnata R. Br.	mosquito fern	(Fed.)
Salvinia auriculata Aubl. complex	salvinia	Q
Salvinia auriculata Aubl. (all rated Salvinias included in the		
Salvinia biloba Raddi *S. auriculata* complex	giant salvinia	(Fed.)
Salvinia herzogii de la Sota as previously		
Salvinia molesta D.S. Mitch. applied in California)		
MAGNOLIOPHYTA — flowering plants		
MAGNOLIOPSIDA — dicots		
ACANTHACEAE		
Hygrophila polysperma (Roxb.) T. Anderson	miramarweed	(Fed.)
AMARANTHACEAE		
Alternanthera philoxeroides (Mart.) Griseb.	alligatorweed	A
Alternanthera sessilis (L.) DC.	sessile joyweed	(Fed.)
APIACEAE		
Heracleum mantegazzianum Sommier & Levier	giant hogweed	(Fed.)
ASCLEPIADACEAE		
Araujia sericifera Brot.	bladderflower	B
ASTERACEAE		
Acroptilon repens (L.) DC.	Russian knapweed	B
Ageratina adenophora (Spreng.) R.M. King & H. Rob.	croftonweed	(Fed.)
Ambrosia trifida L.	giant ragweed	B
Arctotheca calendula Hawksw. & Wiens	capeweed	A
Carduus acanthoides L.	plumeless thistle	A
Carduus nutans L.	musk thistle	A
Carduus pycnocephalus L.	Italian thistle	C
Carduus tenuiflorus Curtis	slenderflowered thistle	C
Carthamus baeticus (Boiss. & Reuter) Nyman	smooth distaff thistle	B
Carthamus lanatus L.	woolly distaff thistle	B
Carthamus leucocaulos Sibth. & Sm.	whitestem distaff thistle	A
Carthamus oxyacantha M. Bieb.	wild safflower	(Fed.)
Centaurea calcitrapa L.	purple starthistle	B

SCIENTIFIC NAME	COMMON NAME	RATING
ASTERACEAE continued		
Centaurea diffusa Lam.	diffuse knapweed	A
Centaurea iberica Spreng.	Iberian starthistle	A
Centaurea maculosa Lam.	spotted knapweed	A
Centaurea repens L.	[See *Acroptilon repens* (L.) DC.]	
Centaurea solstitialis L.	yellow starthistle	C
Centaurea squarrosa Willd., non Roth	squarrose knapweed	A
Centaurea sulphurea Willd.	Sicilian starthistle	B
Chondrilla juncea L.	skeletonweed	A
Cirsium arvense (L.) Scop.	Canada thistle	B
Cirsium ochrocentrum A. Gray	yellowspine thistle	A
Cirsium undulatum (Nutt.) Spreng.	wavyleaf thistle	A
Crupina vulgaris Cass.	bearded creeper	A
Cynara cardunculus L.	artichoke thistle	B
Helianthus ciliaris DC.	blueweed	A
Iva axillaris Pursh	povertyweed	C
Mikania cordata (Burm. f.) B.L. Rob.	mile-a-minute vine	(Fed.)
Mikania micrantha Kunth.	NCN	(Fed.)
Onopordum acanthium L.	Scotch thistle	A
Onopordum illyricum L.	Taurian thistle	A
Onopordum tauricum Willd.	Illyrian thistle	A
Scolymus hispanicus L.	golden thistle	A
Senecio jacobaea L.	tansy ragwort	B
Senecio squalidus L.	Oxford ragwort	B
Sonchus arvensis L.	perennial sowthistle	A
Tagetes minuta L.	wild marigold	A
Tridax procumbens L.	coatbuttons	(Fed.)
BORAGINACEAE		
Symphytum asperum Lepechin	rough comfrey	B
BRASSICACEAE		
Cardaria chalepensis (L.) Hand.-Mazz.	lens-podded hoarycress	B
Cardaria draba(L.) Desv.	heart-podded hoarycress	B
Cardaria pubescens (C.A. Mey.) Jarmol.	globe-podded hoarycress	B
Chorispora tenella (Pallas) DC.	purple mustard	B
Coronopus squamatus (Forskall) Asch.	swinecress	B
Isatis tinctoria L.	dyer's woad	B
Lepidium latifolium L.	perennial peppercress	B
Rorippa austriaca (Crantz) Besser	Austrian field cress	B
Rorippa sylvestris (L.) Besser	creeping yellow field cress	Q
CACTACEAE		
Opuntia aurantiaca Lindl.	jointed pricklypear	(Fed.)
CARYOPHYLLACEAE		
Drymaria arenarioides Wedd.	alfombrilla	(Fed.)
Gypsophila paniculata L.	baby's breath	B

SCIENTIFIC NAME	COMMON NAME	RATING
CHENOPODIACEAE		
Halogeton glomeratus (M. Bieb.) C.A. Mey.	halogeton	A
Salsola tragus L.	common Russianthistle	C
CHENOPODIACEAE continued		
Salsola collina Benth.	spineless Russianthistle	Q
Salsola damascena V.P. Bostschantzeu	wormleaf salsola	A
Salsola paulsenii L.	barbwire Russianthistle	C
Salsola vermiculata L.	(See *Salsola damascena*)	
COMPOSITAE - See Asteraceae		
CONVOLVULACEAE		
Convolvulus arvensis L.	field bindweed	C
Ipomoea aquatica Forssk.	water spinach	(Fed.)
Ipomoea triloba L.	little bell	(Fed.)
CRUCIFERAE - See Brassicaceae		
CUCURBITACEAE		
Cucumis melo L. var. *dudaim* (L.) Naudin	dudaim melon	A
Cucumis myriocarpus Naudin	paddy melon	B
CUSCUTACEAE		
Cuscuta reflexa Roxb.	giant dodder	A
Cuscuta spp. except *C. reflexa*	dodder	C
Cuscuta spp. (see 7CFR 360.200 for 53 exceptions.)	dodder	(Fed.)
EUPHORBIACEAE		
Euphorbia esula L.	leafy spurge	A
Euphorbia oblongata Griseb.	oblong spurge	B
Euphorbia serrata L.	serrate spurge	A
FABACEAE		
Acacia paradoxa DC.	kangaroothorn	B
Aeschynomene rudis Benth.	rough jointvetch	B
Alhagi pseudalhagi (M. Bieb.) Desv.	camelthorn	A
Cytisus scoparius (L.) Link	Scotch broom	C
Galega officinalis L.	goatsrue	(Fed.)
Genista monspessulana (L.) L.A.S. Johnson	French broom	C
Halimodendron halodendron (L.) Voss	Russian salttree	A
Mimosa invisa Mart. ex Colla	giant sensitive plant	(Fed.)
Mimosa pigra L. var. *pigra*	catclaw mimosa	(Fed.)
Ononis alopecuroides L.	foxtail restharrow	Q
Prosopis strombulifera (Lam.) Benth.	creeping mesquite	A

SCIENTIFIC NAME	COMMON NAME	RATING
FABACEAE (Continued)		
Prosopis spp. (see Federal list under mesquite for 25 named species.)		(Fed.)
Sphaerophysa salsula (Pall.) DC.	Austrian peaweed	A
Ulex europaeus L.	gorse	B
HYPERICACEAE		
Hypericum perforatum L.	Klamathweed	C
LAMIACEAE		
Salvia aethiopis L.	Mediterranean sage	B
Salvia virgata L.	southern meadow sage	A
LEGUMINOSAE - See Fabaceae		
LORANTHACEAE - See Viscaceae		
LYTHRACEAE		
Lythrum salicaria L.	purple loosestrife	B
MALVACEAE		
Malvella leprosa (Ortega) Krapov.	alkali mallow	C
MELASTOMATACEAE		
Melastoma malabathrica L.		(Fed.)
MYRTACEAE		
Melaleuca quinquenervia (Cav.) S.T. Blake	cajeput; broadleaf paper bark tree	(Fed.)
NYMPHEACEAE		
Nymphaea mexicana Zucc.	banana waterlily	B
ONAGRACEAE		
Gaura coccinea Pursh	scarlet gaura	B
Gaura drummondii (Spach) Torr. & A. Gray	Drummond's gaura	B
Gaura sinuata Ser.	wavy-leaved gaura	B
OROBANCHACEAE		
Aeginetia spp.		(Fed.)
Orobanche cooperi (A. Gray) A. Heller	Cooper's broomrape	A
Orobanche ramosa L.	branched broomrape	A
Orobanche spp. (See 7CFR 360.200 for 13 exceptions.)		(Fed.)

SCIENTIFIC NAME	COMMON NAME	RATING
POLYGONACEAE		
Emex australis Steinh.	three-cornered jack	(Fed.)
Emex spinosa (L.) Campd.	devil's thorn	(Fed.)
Polygonum amphibium L. var *emersum* Michx.	kelp	C
Polygonum cuspidatum Sieb. & Zucc.	Japanese knotweed	B
Polygonum polystachyum Meissner	Himalayan knotweed	B
Polygonum sachalinense Maxim.	giant knotweed	B
ROSACEAE		
Acaena novae-zelandiae Kirk	biddy-biddy	A
Acaena pallida (Kirk) H.H. Allan	pale biddy-biddy	A
Rubus fruticosus L.	wild blackberry	(Fed.)
Rubus moluccanus L.	wild raspberry	(Fed.)
RUBIACEAE		
Borreria alata (Aubl.) DC.		(Fed.)
SCROPHULARIACEAE		
Alectra spp.		(Fed.)
Limnophila sessiliflora (Vahl) Blume		(Fed.)
Linaria genistifolia (L.) Mill. ssp. *dalmatica* (L.) Maire & Petitm.	Dalmatian toadflax	A
Striga asiatica (L.) Kuntze	witchweed	A
Striga spp.	witchweeds	(Fed.)
SOLANACEAE		
Hyoscyamus niger L.	black henbane	C
Lycium ferocissimum Miers	African boxthorn	(Fed.)
Physalis longifolia Nutt.	long-leaf groundcherry	A
Physalis viscosa L.	grape groundcherry	B
Solanum cardiophyllum L.	heartleaf nightshade	A
Solanum carolinense L.	Carolina horsenettle	B
Solanum dimidiatum Raf.	Torrey's nightshade	A
Solanum elaeagnifolium Cav.	white horsenettle	B
Solanum lanceolatum Cav.	lanceleaf nightshade	B
Solanum marginatum L.f.	white-margined nightshade	B
Solanum torvum Sw.	turkeyberry	(Fed.)
Solanum viarum Dunal in A. DC.	tropical sodaapple	(Fed.)
UMBELLIFERAE - See Apiaceae		
VISCACEAE		
Viscum album L.	European mistletoe	B
ZYGOPHYLLACEAE		
Peganum harmala L.	harmel	A
Tribulus terrestris L.	puncturevine	C
Zygophyllum fabago L.	Syrian beancaper	A

SCIENTIFIC NAME	COMMON NAME	RATING
MAGNOLIOPHYTA — flowering plants		
LILIOPSIDA — monocots		
ALISMATACEAE		
Sagittaria sagittifolia L.	arrowhead	(Fed.)
ALLIACEAE		
Allium paniculatum L.	panicled onion	B
Allium vineale L.	wild garlic	B
Nothoscordum inodorum (Ait.) Nicholson	false garlic	B
ASPHODELACEAE		
Asphodelus fistulosus L.	onionweed	(Fed.)
COMMELINACEAE		
Commelina benghalensis L.	Bengal dayflower	(Fed.)
CYPERACEAE		
Cyperus esculentus L.	yellow nustedge	B
Cyperus rotundus L.	purple nustedge	B
HYDROCHARITACEAE		
Hydrilla verticillata (L.f.) Royle	hydrilla	A
Lagarosiphon major (Ridl.) Moss.		(Fed.)
Limnobium laevigatum (Humb. & Bonpl. ex Willd.)	S. American spongeplant	Q
Ottelia alismoides (L.) Pers.		(Fed.)
IRIDACEAE		
Iris douglasiana Herb.	Douglas iris	C
Iris missouriensis Nutt.	western blue flag	C
LILIACEAE - see Alliaceae, Asphodelaceae		
POACEAE		
Achnatherum brachychaetum (Godr.) Barkworth	punagrass	A
Aegilops cylindrica Host	jointed goatgrass	B
Aegilops ovata L., non Nevski	ovate goatgrass	B
Aegilops triuncialis L.	barb goatgrass	B
Avena sterilis L.	animated oat	(Fed.)
Cenchrus echinatus L.	southern sandbur	C
Cenchrus incertus M. Curtis	coast sandbur	C
Cenchrus longispinus (Hackel) Fernald	mat sandbur	C
Chrysopogon aciculatus (Retz.) Trin.	pilipiliula	(Fed.)
Cynodon spp. & hybrids	bermudagrass	C
Digitaria scalarum (Schweinf.) Chiov.	African couchgrass	(Fed.)
Digitaria velutina (Forssk.) P. Beauv.	annual couchgrass	(Fed.)
Elytrigia repens (L.) Desv.	quackgrass	B

SCIENTIFIC NAME	COMMON NAME	RATING
POACEAE continued		
Heteropogon contortus (L.) Roem. & Schult.	tanglehead	A
Imperata brasiliensis Trin.	Brazilian satintail	(Fed.)
Imperata brevifolia Vasey	satintail	B
Imperata cylindrica (L.) Raeusch.	cogongrass	(Fed.)
Ischaemum rugosum Salisb.	murainograss	(Fed.)
Leptochloa chinensis (L.) Nees	Asian sprangletop	(Fed.)
Muhlenbergia schreberi S. Gmelin	nimblewill	B
Nassella trichotoma (Nees) Hack. ex Arechav.	serrated tussock	(Fed.)
Oryza rufipogon Griff.	perennial wild red rice	B
Oryza longistaminata A. Chev. & Roehr.	perennial wild red rice	(Fed.)
Oryza punctata Kotschy ex Steud.	annual wild red rice	(Fed.)
Panicum antidotale Retz.	blue panicgrass	B
Paspalum scrobiculatum L.	kodo millet	(Fed.)
Pennisetum clandestinum Chiov.	Kikuyugrass	C
Pennisetum macrourum Trin.	African feathergrass	(Fed.)
Pennisetum pedicellatum Trin.	kyasumagrass	(Fed.)
Pennisetum polystachion (L.) Schult.	missiongrass	(Fed.)
Rottboellia exaltata L.f.	itchgrass	(Fed.)
Saccharum spontaneum L.	wild sugarcane	(Fed.)
Setaria faberi R. Herrm.	giant foxtail	B
Setaria pallide-fusca (Schumach.) Stapf & C.E. Hubb.	cattailgrass	(Fed.)
Sorghum halepense (L.) Pers.	Johnsongrass	
Stipa brachychaeta Godr.	[see *Achnatherum brachychaetum* (Godr.) Barkworth]	
Taeniatherum caput-medusae (L.) Nevski	medusa-head	C
Urochloa panicoides P. Beauv.	liverseed grass	(Fed.)
PONTEDERIACEAE		
Eichhornia azurea (Sw.) Kunth	peacock water hyacinth	(Fed.)
Monochoria hastata (L.) Solms in A. DC. & C. DC.		(Fed.)
Monochoria vaginalis (Burm. f.) C. Presl	monochoria	(Fed.)
SPARGANIACEAE		
Sparganium erectum L.	exotic burreed	(Fed.)

STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE
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List 6. RATED WEED SPECIES — NATIVE DISTRIBUTIONS
Contributed by Irene Wibawa (Botany Laboratory, Herbarium CDA)

RATING	SCIENTIFIC NAME	NATIVE DISTRIBUTION
B	*Acacia paradoxa*	s Australia
A	*Acaena novae-zelandiae*	se Australia, New Zealand, New Guinea
A	*Acaena pallida*	se Australia, New Zealand
A	*Achnatherum brachychaetum*	S. America
B	*Acroptilon repens*	Asia
B	*Aegilops cylindrica*	Mediterranean Europe, w Asia
B	*Aegilops ovata*	Mediterranean Europe, w Asia
B	*Aegilops triuncialis*	Mediterranean Europe, w Asia
B	*Aeschynomene rudis*	tropical America
A	*Alhagi pseudalhagi*	Turainian Desert to Iranian Plateau w through Anatolia to Rhodes & Cyprus
B	*Allium paniculatum*L.	s Europe, Mediterranean, w & c Asia
B	*Allium vineale*	Europe, n Africa, w Asia
A	*Alternanthera philoxeroides*	S. America
B	*Ambrosia trifida*	c & e US
B	*Araujia sericifera*	s Brazil
A	*Arctotheca calendula*	s Africa
B	*Cardaria chalepensis*	c Asia; possibly Middle East
B	*Cardaria draba*	Eurasia
B	*Cardaria pubescens*	Middle East and c Asia, Eurasia
A	*Carduus acanthoides*	Europe; possibly Asia
A	*Carduus nutans*	Eurasia
C	*Carduus pycnocephalus*	s & se Europe
C	*Carduus tenuiflorus*	w Europe
B	*Carthamus baeticus*	Mediterranean
B	*Carthamus lanatus*	Mediterranean

RATING	SCIENTIFIC NAME	NATIVE DISTRIBUTION
A	*Carthamus leucocaulos*	Mediterranean
C	*Cenchrus echinatus*	s US, Mexico, C. & S. America
C	*Cenchrus incertus*	s US, Mexico, C. & S. America
C	*Cenchrus longispinus*	c & e US
B	*Centaurea calcitrapa*	s Sweden to n Africa
A	*Centaurea diffusa*	Mediterranean, se Europe
A	*Centaurea iberica*	se Europe, Balkans to sw & c Asia
A	*Centaurea maculosa*	e Europe, w Siberia
C	*Centaurea solstitialis*	s Europe, Mediterranean
A	*Centaurea squarrosa*	Middle East
B	*Centaurea sulphurea*	sw Europe
A	*Chondrilla juncea*	s Europe
B	*Chorispora tenella*	sw Asia
B	*Cirsium arvense*	Eurasia, n Africa
A	*Cirsium ochrocentrum*	c US
A	*Cirsium undulatum*	c US
C	*Convolvulus arvensis*	Europe, Eurasia
B	*Coronopus squamatus*	Europe
A	*Crupina vulgaris*	s Europe
A	*Cucumis melo* var. *dudaim*	tropical Africa, Asia
B	*Cucumis myriocarpus*	s Africa
A	*Cuscuta reflexa*	s Asia
C	*Cuscuta* spp. except *C. reflexa*	various; some native to CA
B	*Cynara cardunculus*	sw Mediterranean, Morocco
C	*Cynodon* spp. & hybrids	tropical, warm temperate Eurasia, Africa
B	*Cyperus esculentus*	s Europe to India
B	*Cyperus rotundus*	Eurasia
C	*Cytisus scoparius*	s Europe, n Africa

RATING	SCIENTIFIC NAME	COMMON NAME
B	*Elytrigia repens*	Eurasia
A	*Euphorbia esula*	Europe, Eurasia
B	*Euphorbia oblongata*	s Europe
A	*Euphorbia serrata*	w Mediterranean, France
B	*Gaura coccinea*	CA (Desert Mtns), w Canada, c US, Mexico
B	*Gaura drummondii*	c TX, c Mexico
B	*Gaura sinuata*	OK, TX
C	*Genista monspessulana*	Mediterranean, the Azores, s Europe (Portugal to Asia Minor)
B	*Gypsophila paniculata*	e & c Europe, adjacent Asia
A	*Halimodendron halodendron*	sw Asia
A	*Halogeton glomeratus*	Eurasia
A	*Helianthus ciliaris*	sc US, n Mexico
A	*Heteropogon contortus*	CA (Sonoran Desert)
A	*Hydrilla verticillata*	Eurasia
C	*Hyoscyamus niger*	Mediterranean, Europe
C	*Hypericum perforatum*	Europe to c China, n Africa, w Himalaya
B	*Imperata brevifolia*	CA (SnJV, Sco, SnGb, SnBr, DMoj)
C	*Iris douglasiana*	CA (NW, CW, n SW), OR
C	*Iris missouriensis*	CA (NCoR, SN, SCoRI, TR, PR, GB); w N.America, n Mexico
B	*Isatis tinctoria*	Eurasia, primarily Turkey & Iran
C	*Iva axillaris*	CA to B.C., MT, c US, TX
B	*Lepidium latifolium*	Eurasia
Q	*Limnobium laevigatum*	S. & C. America
A	*Linaria genistifolia* ssp. *dalmatica*	Mediterranean
B	*Lythrum salicaria*	Europe
C	*Malvella leprosa*	CA (esp. GV), to WA, ID, TX, Mexico, S. America

RATING	SCIENTIFIC NAME	NATIVE DISTRIBUTION
B	*Muhlenbergia schreberi*	e US, TX, c Mexico, S. America
B	*Nothoscordum inodorum*	S. America
B	*Nymphaea mexicana*	se US, FL, TX, Mexico
Q	*Ononis alopecuroides*	Europe, n Africa, Middle East
A	*Onopordum acanthium*	w Europe to c Asia
A	*Onopordum illyricum*	se Europe
A	*Onopordum tauricum*	Mediterranean
A	*Orobanche cooperi*	CA (Desert), to UT, AZ, Baja CA
A	*Orobanche ramosa*	s Europe
B	*Oryza rufipogon*	se Asia
B	*Panicum antidotale*	India
A	*Peganum harmala*	se Europe to warm Asia
C	*Pennisetum clandestinum*	tropical Africa, sw Asia, Arabia
A	*Physalis longifolia*	e N. America
B	*Physalis viscosa*	c US, e Mexico
C	*Polygonum amphibium* var. *emersum*	CA-FP, w DMoj; to e N. America, Eurasia
B	*Polygonum cuspidatum*	Japan
B	*Polygonum polystachyum*	s & c Asia
B	*Polygonum sachalinense*	Japan
A	*Prosopis strombulifera*	Argentina
B	*Rorippa austriaca*	Austria, Europe
Q	*Rorippa sylvestris*	Europe
C	*Salsola tragus*	Eurasia
Q	*Salsola collina*	Siberia
C	*Salsola paulsenii*	se Europe, c Asia
A	*Salsola damascena*	nw Mediterranean
B	*Salvia aethiopis*	c & s Europe, w Asia
A	*Salvia virgata*	e Mediterranean to c Asia

RATING	SCIENTIFIC NAME	NATIVE DISTRIBUTION
Q	*Salvinia auriculata* complex	Mexico to n Argentina & Bolivia, Florida, Cuba, Hispaniola, Jamaica
A	*Scolymus hispanicus*	s Europe to nw France
B	*Senecio jacobaea*	Eurasia
B	*Senecio squalidus*	Europe
B	*Setaria faberi*	e Asia
A	*Solanum cardiophyllum*	Mexico
B	*Solanum carolinense*	c & e US, n Mexico
A	*Solanum dimidiatum*	S. America (Brazil)
B	*Solanum elaeagnifolium*	c & sw US, S. America, n Mexico
B	*Solanum lanceolatum*	Mexico, C. America
B	*Solanum marginatum*	Africa (Ethiopia)
A	*Sonchus arvensis*	Eurasia
C	*Sorghum halepense*	Mediterranean
A	*Sphaerophysa salsula*	n & c Asia
A	*Striga asiatica*	ow tropics
B	*Symphytum asperum*	Europe, sw Asia, Caucasus, Iran
C	*Taeniatherum caput-medusae*	s Europe
A	*Tagetes minuta*	c & w S. America
C	*Tribulus terrestris*	Mediterranean
B	*Ulex europaeus*	w Europe
B	*Viscum album*	Eurasia
A	*Zygophyllum fabago*	Mediterranean, c Asia